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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 22850 | 7590 02/27/2006 | | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. | | | NGUYEN, STEVEN H D | |
| | ALEXANDRIA, VA 22314 | | | PAPER NUMBER |
| | | | 2665 | |
| | | | DATE MAILED: 02/27/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | 09/926,280 | l | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|--|--|
| Office Action Comment | 00/020,200 | BODIN, UIF | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Steven HD Nguyen | 2665 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | correspondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period value - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1)⊠ Responsive to communication(s) filed on 05 Dec | Responsive to communication(s) filed on 05 December 2005. | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| 3) Since this application is in condition for allowar | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) 1-25 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) 13-21 is/are allowed. 6) Claim(s) 1-12 is/are rejected. 7) Claim(s) 4 and 5 is/are objected to. 8) Claim(s) are subject to restriction and/or | vn from consideration. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine | epted or b) objected to by the bedrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National Stage | | | |
| | | | | | |
| Attachment/c) | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date S. Patent and Trademark Office | Paper No(s)/Mail Da | | | | |

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DETAILED ACTION

Specification

Content of Specification

- (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.
- (c) <u>Statement Regarding Federally Sponsored Research and Development</u>: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
 - Or alternatively, <u>Reference to a "Microfiche Appendix</u>": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.
- (f) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
 - (1) <u>Field of the Invention</u>: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
 - (2) Description of the Related Art including information disclosed under 37

 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

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general statement of the invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

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- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) <u>Claim or Claims</u>: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

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(1) Sequence Listing, See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

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Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 2. Claim₁1, 3 and 23-25 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A method of managing an active queue by providing, preventing preserving does not fall within any of the four categories of statutory subject matter of 35 U.S.C. § 101. The claimed invention is not limited to a practical application. Viewed as a whole, the claimed invention merely expresses an abstract construct for managing an active queue. It does not impart any functions to a processing system, i.e., the claimed invention is not practical applied. Instead, the claimed invention merely provides an abstract ideal. The claimed abstract ideal is clearly not a process because they do not have any limitation to a practical application. The other three § 101 classes of machine, compositions of matter and manufactures can be group as product claims, and the product classes have required physical structure or material. The claimed abstract ideal does not itself perform any useful concrete and tangible result, i.e., no post solution activity, and thus does not fit within the definition of a machine. The claimed abstract ideal does not fall within the product classes, machine and composition of matter.
- 3. Claims 2, 6-12 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A method of managing an active queue by calculating the drop

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probabilities of the differentiation traffic having one of drop profiles and creating threshold levels for applying to the drop levels and setting a value does not fall within any of the four categories of statutory subject matter of 35 U.S.C. § 101. The claimed invention is not limited to a practical application. Viewed as a whole, the claimed invention merely expresses an abstract construct for managing an active queue by calculating and setting threshold and drop levels. It does not impart any functions to a processing system, i.e., the claimed invention is not practical applied. Instead, the claimed invention merely provides an abstract ideal how to calculating and setting threshold and drop levels. The claimed abstract ideal is clearly not a process because they do not have any limitation to a practical application. The other three § 101 classes of machine, compositions of matter and manufactures can be group as product claims, and the product classes have required physical structure or material. The claimed abstract ideal does not itself perform any useful concrete and tangible result, i.e., no post solution activity, and thus does not fit within the definition of a machine. The claimed abstract ideal does not fall within the product classes, machine and composition of matter.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1, 3 and 23-25 rejected under 35 U.S.C. 102(e) as being anticipated by Skirmont (USP 6252848).

Regarding claims 1 and 23-25, Skirmont discloses a method for handling the prioritized traffic comprising in a packet transmission system, providing differentiation between traffic originating from rate adaptive applications that respond to packet loss, wherein traffic is assigned one, of at least two drop precedent levels (Col. 4, lines 60-67), preventing starvation of low prioritized traffic (Col. 2, lines 34-55, USD inherently discloses a method for preventing starvation of low prioritized traffic, Col. 2, lines 34-55), preserving a strict hierarchy among precedence levels (Col. 2, lines 34-55); providing absolute differentiation of traffic (USD inherently discloses a method for providing absolute differentiation by allocated bandwidth for traffic, Col. 2, lines 34-55).

Regarding claim 3, Skirmont discloses a method for providing absolute if a prioritized traffic is fully controlled and relative differentiation if the prioritized traffic is fully controlled (Col. 2, lines 34-55, inherently for USD).

Allowable Subject Matter

- 6. Claims 13-22 allowed.
- 7. Claims 4-5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven HD Nguyen Primary Examiner Art Unit 2665

February 16, 2006